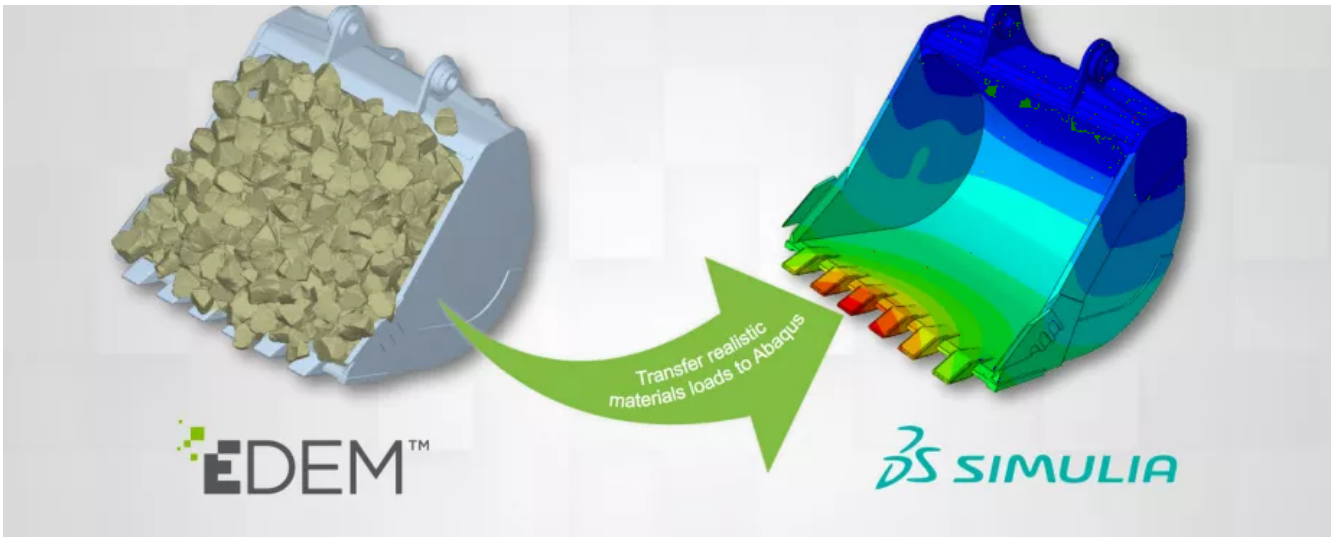


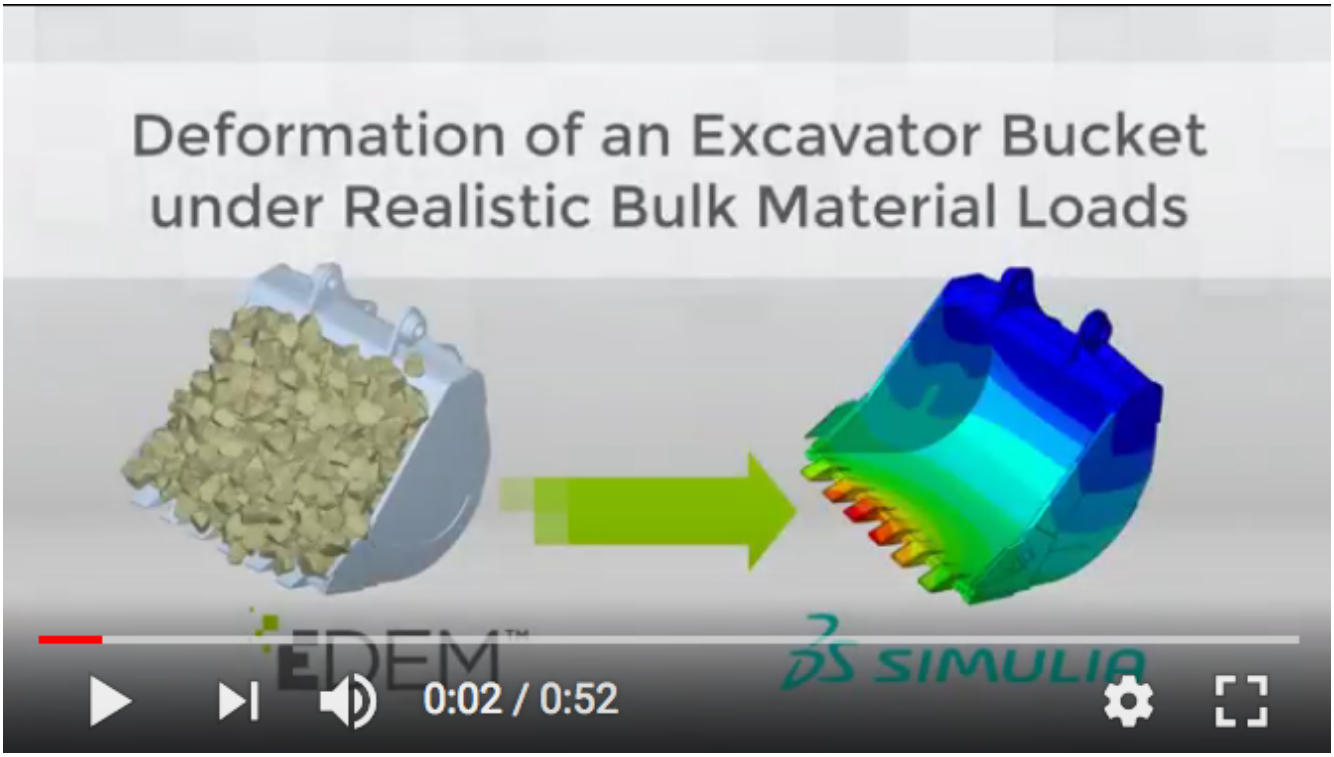
Product News

EDEM collaborates with Dassault Systemes to deliver new coupling application for optimizing heavy equipment design

Edited by on 17. Oct. 2017
Edinburgh, United Kingdom –

EDEM is used daily by engineers in multiple industries around the world as an integral part of their design processes. **EDEM** recreates a wide range of bulk material types and real-world behaviors from gravel, sand and rocks; to compressible soils, clays, and highly cohesive ores. Materials can be selected from a library of over 40,000 ready-to-use material models, or customized to suit specific application needs.With an easy-to-use interface, highly-optimized CPU & GPU solvers and powerful analysis tools, **EDEM** delivers realistic predictions of material loads and forces acting on equipment parts during operation. With the EDEM-Abaqus sequential coupling, engineers are able to export these realistic loads from EDEM and use them as a direct input to SIMULIA Abaqus FE simulations.Using high-fidelity loads in ***SIMULIA Abaqus*** provides engineers with greater insight into equipment performance and means improved design accuracy. By removing the reliance on hand-calculation and assumption to determine equipment loading, engineers using **EDEM** with ***SIMULIA Abaqus*** are also able to reduce the frequency and cost of expensive physical prototyping. ***Richard LaRoche***, Chief Executive Officer of **EDEM**, commented:*“When designing heavy equipment intended to handle bulk materials, getting representative load data is critical to have confidence in a design and ensure its*

durability and performance. We're pleased to be working with the Dassault Systèmes SIMULIA team to enable SIMULIA Abaqus users to benefit from EDEM's realistic material loads – leading to greater understanding of equipment performance ahead of prototyping." ***Sumanth Kumar***, Vice President, Growth, SIMULIA, at **Dassault Systemes**, added: *"This application will help SIMULIA Abaqus users by providing alternative means to remove material modeling assumptions in their FE analysis. This will lead to more optimal designs being produced with confidence."* The ***EDEM-Abaqus*** coupling is available as part of ***EDEM 2018*** – the latest release of **EDEM** software. For more information download the **EDEM-Abaqus ebook**.Here is a Video showing the new coupling in action:



Excavator Bucket Deformation under Realistic Bulk Material Loads (EDEM-Abaqus) Using EDEM in combination with Dassault Systèmes' SIMULIA Abaqus provides engineers designing bulk materials handling equipment with a detailed understanding of the impact materials have on their designs. The EDEM-Abaqus sequential coupling enables engineers to export realistic bulk material loads from EDEM and use them as direct input to Abaqus FE simulations. Using high-fidelity loads in SIMULIA Abaqus provides engineers with greater insight into equipment performance and means improved design accuracy as well as reduced prototyping costs.

About EDEMEDEM *is the market-leading Discrete Element Method (DEM) software for bulk material simulation.* ***EDEM*** *simulation technology is used for 'virtual testing' of equipment that handles or processes bulk materials in the mining, equipment manufacturing and process industries. Companies worldwide*

*use **EDEM** to optimize equipment design, increase productivity, reduce costs of operations, shorten product development cycles and drive product innovation. **EDEM** is a global company established in 2003 as DEM Solutions Ltd. and headquartered in Edinburgh, UK with offices in USA and Japan and supported by a network of channel partners in South America, South Africa and Asia-Pacific.*